METHODS OF RECORDING VOICE SIGNALS IN A MOBILE SET

CLAIMS

What is claimed is:

1. A mobile set having a voice recording means for storing voice conversations received through the mobile set and capable of playback on the mobile set, the mobile set comprising:

(a) a uplink/downlink switch for selecting speech frames from either a uplink or downlink signal;

(b) at least one switching logic controller for switching between the uplink and downlink signals;

(c) a method of file header generation for generating headers for recorded speech files;

(d) a recorder controlling means for configuring and controlling of a recorder operation in one of several modes available to a subscriber; and

(e) a memory element.

2. A method if a mobile set for storing voice recordings, the method comprising:

(a) controlling a processor to identify speech containing time frames from at least one uplink and at least one downlink signal; and

(b) recording the speech containing time frames from said uplink and said downlink signals such that each time frame is recorded sequentially with a time stamp for each time frame.

3. The method as in claim 2, wherein the voice detector is a processor having a buffer for storing multiple time frames of uplink and downlink signals, and capable of assigning each time frame a logic value while sorting through signals of the same time frame.

4. A method in a mobile set for determining record worthy voice time frames, the method comprising:

(a) receiving a first signal in a voice activity detector;

(b) receiving a second signal in the voice activity detector;

(c) comparing the first signal to the second signal, wherein the first and second signals have the same time stamp, and selecting the signal having a high logic value for recording; and

(d) substituting the low logic value signal with a placeholder marker for recording.

5. The method of claim 4, wherein step (d) alternatively comprises:

(d) Recording the low logic value signal without performing any substitution.

6. The method of claim 4, wherein the first voice signal is a uplink signal, and the second voice signal is a downlink signal.

7. The method of claim 4, wherein the first signal or the second signal contains a plurality of signals of the same type.

8. A computer-readable medium containing instructions for controlling a mobile set processor to record multimedia signals, comprising:

(a) controlling a voice activity detector to compare a plurality of voice signals having identical time stamps and arranging the voice signals such that data containing time stamp sequences are arranged sequentially into a single data file;

(b) controlling a processor to identify non-voice signals containing the same time stamp as data containing voice time stamp sequences; and

(c) sequentially recording the data containing voice signals and the corresponding time stamp non-voice signals such that both the voice and non-voice data signals are sequentially recorded into a memory element as a single data file.

9. The computer-readable medium of claim 8, wherein the non-voice data sequences are video data.

10. A computer-readable medium containing a data structure for storing voice signals comprising a conversation list containing an entry for each of one or more phone conversations, each entry comprising a single string of data records wherein each data record has a file pointer to the next record, the last record having an end of file marker, each record corresponding to at least one time stamp of the phone conversation for use in restoring the data structure to a media understandable by a user.

11. The computer-readable medium of claim 10, wherein the data structure further comprises non-voice signals.

12. The computer-readable medium of claim 11, wherein the non-voice signals are computer readable files.

13. The computer-readable medium of claim 10, wherein the data structure is stored on a removable persistent memory element.

14. A method in a mobile set for selecting data to be stored, comprising:

(a) displaying a plurality of recording modes; and

(b) indicating a selection means for choosing a recording mode.

15. The method of claim 14, further comprising step (c) providing a confirmation signal after a selection means for choosing a recording mode has been selected.

16. A method in a mobile set for replaying recorded conversations, comprising:

(a) displaying a line indicating a data structure of recorded conversations; and

(b) in response to selection of the displayed line, replaying a recorded conversation.

17. A method in a mobile set, for replaying previously recorded conversations during a real time conversation, comprising:

(a) displaying a list of data structures representing recorded conversations; and

(b) in response to selection of the displayed list, replaying at least a portion of a data structure.

18. The method of claim 17, wherein the displaying of a list of data structures can be accessed during a real time subscriber conversation using the mobile set without interfering in the communication between the subscriber and a base station.

19. The method of claim 17, wherein in response to a selection of the displayed list, a portion of a previously recorded conversation may be played back and transmitted through the uplink signal.